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EXAMINER	
CHEN, SHIN HON	

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/695,821	HYDRIE ET AL.	
	Examiner	Art Unit	
	Shin-Hon Chen	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,6-41 and 43-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,6-41 and 43-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/4/05,6/2/05*.,
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 4, 6-41, and 43-47 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6, 28-32, 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain et al. U.S. Pat. No. 6047325 (hereinafter Jain) in view of Coss et al. U.S. Pat. No. 6141749 (hereinafter Coss) and further in view of Schmidt U.S. Pat. No. 5826015 (hereinafter Schmidt) and further in view of Epstein, III et al. U.S. Pat. No. 6684335 (hereinafter Epstein).

4. As per claim 1, Jain discloses a system comprising: a set of filters (Jain: column 2 lines 8-18); a mapping of virtual addresses to network addresses (Jain: column 1 line 65 – column 2 line 67); and a controller, coupled to the set of filters and the mapping, to, access, upon receipt of a data packet requested to be sent from a computing device to a target device via a network (Jain: column 1 line 65 – column 2 line 67), the set of filters and determine whether the data packet can be sent to the target device based on whether the computing device is allowed to communicate with the target device (Jain: column 1 line 65 – column 2 line 67), replace, based on the mapping, the target address in the data packet with a corresponding target network address (Jain: column 1 line 65 – column 2 line 67); and forward the data packet to the target device at the

target network address if it is determined the data packet can be sent to the target device (Jain: column 1 line 65 – column 2 line 67). Jain does not explicitly disclose preventing the computing device from modifying any of the filters in the set of filters, but allow the set of filters to be modified by a plurality of remote devices operating at a plurality of different managerial levels. However, Coss discloses remote proxy or administrator loads filters (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the system of Jain because it is well known in the art.

Jain as modified does not explicitly disclose preventing the computing device from modifying any of the filters. However, Schmidt discloses preventing local users from modifying sensitive/security data and only allow authorized remote users to perform modification (Schmidt: column 21 lines 9-32 and column 3 lines 10-30). It would have been obvious to one having ordinary skill in the art to prevent the local modification to the sensitive data in a computing device because it allows unauthorized users to easily modify sensitive data once they obtain physical access to the computing device. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Schmidt within the combination of Jain-Coss because it allows the system to remotely manage network devices while preventing users from locally modifying sensitive data that bypasses the security monitoring.

Jain as modified does not explicitly disclose plurality of remote devices operating at different managerial levels. However, Epstein discloses a hierarchy in network in which certain node in the network has the ability to control many functions and communication behaviors of other nodes (Epstein: column 2 lines 40-50). It would have been obvious to one having ordinary

skill in the art to allow the remote devices having different level of authorities to configure the security settings of a subordinate node. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Epstein within the combination of Jain-Coss-Schmidt because it allows each node to be programmed by only certain other predetermined nodes (Epstein: column 1 lines 17-21).

5. As per claim 6, 28, 34, 35, and 36, Jain as modified discloses a system as recited in 5. Jain as modified further discloses the system comprising allowing the set of filters to be modified by a lower managerial level remote device only if the modifications are not less restrictive than modifications imposed by a higher managerial level remote device (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

6. As per claim 29, Jain as modified discloses a method as recited in claim 28. Jain as modified further discloses wherein the preventing comprises: receiving a request from the lower managerial level device to modify the set of filters (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41); determining whether the requested modification would result in, a violation of a filter previously added to the set of filters by the higher managerial device (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41); and performing the requested modification if the requested modification would not result in a violation, and otherwise not performing the requested modification (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

7. As per claim 30 and 37, Jain as modified discloses a method as recited in claims 29 and 35 respectively. Jain as modified further discloses wherein the requested modification comprises one or more of: adding a filter to the set of filters, modifying a filter in the set of filters, and deleting a filter from the set of filters (Coss: column 2 lines 30-43).

8. As per claim 31, Jain as modified discloses a method as recited in claim 28, wherein the violation occurs if the modification would result in a filter being less restrictive that the filter added by the higher managerial level device (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

9. As per claim 32 and 38, Jain as modified discloses a method as recited in claims 28 and 35 respectively. Jain as modified further comprising preventing the computing device from modifying the set of filters (Schmidt: column 21 lines 9-32 and column 3 lines 10-30).

10. Claims 4, 39, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Epstein and further in view of Boden et al. U.S. Pat. No. 6717949 (hereinafter Boden).

11. As per claim 4, 39, 44, and 45. Jain as modified discloses a system as recited in claim 1. Jain as modified does not explicitly disclose wherein the controller is to make the computing device aware of the virtual addresses in the mapping but to hide the network addresses in the mapping from the computing device. However, Boden discloses that limitation (Boden: column

1 line 26 – column 2 line 9). Using address translation and hide address to increase network security is well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Boden within the system of Jain.

12. As per claim 46 and 47, Jain as modified discloses a network mediator as recited in claim 45. Jain as modified further discloses wherein the network mediator is communicatively coupled to the computing device (Schmidt: column 21 lines 18-32).

13. Claims 7, 9, 19, 20, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt.

14. As per claim 7, 19, and 20, Jain discloses maintaining, at a computing device, a set of filters that restrict the ability of the computing device to communicate with other computing devices (Jain: column 1 line 65 – column 2 line 67). Jain does not explicitly disclose allowing the set of filters to be modified from a remote device and preventing the computing device from modifying the set of filters. However, Coss discloses that limitation (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the system of Jain because it is well known in the art.

Jain as modified does not explicitly disclose preventing the computing device from modifying the set of filters. Schmidt discloses preventing local users from modifying sensitive/security data and only allow authorized remote users to perform modification (Schmidt: column 21 lines 9-32 and column 3 lines 10-30). It would have been obvious to one having

ordinary skill in the art to prevent the local modification to the sensitive data in a computing device because it allows unauthorized users to easily modify sensitive data once they obtain physical access to the computing device. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Schmidt within the combination of Jain-Coss because it allows the system to remotely manage network devices while preventing users from locally modifying sensitive data that bypasses the security monitoring.

15. As per claim 9 and 22, Jain as modified discloses a method as recited in claims 7 and 20 respectively. Jain as modified further discloses wherein modification of the set of filters includes one or more of: adding a new filter to the set of filters, deleting a filter from the set of filters, and changing one or more parameters of a filter in the set of filters (Coss: column 2 lines 30-43).

16. As per claim 21, Jain as modified discloses a network mediator as recited in claim 20. wherein the controller is further to access, upon receipt of another data packet from another target device via the network, the set of filters and determine whether the data packet can be received at the computing device based on whether the computing device is allowed to receive communications from the other target device (Jain: column 1 line 65 – column 2 line 67).

17. As per claim 23 and 24, Jain as modified discloses a network mediator as recited in claim 20, wherein the network mediator is coupled to the computing device (Schmidt: column 21 lines 17-32).

18. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Boden et al. U.S. Pat. No. 6266707 (hereinafter Boden2).

19. As per claim 8, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly discloses wherein restriction of the ability of the computing device to communicate with other computing devices comprises restricting the computing device from transmitting data packets to one or more other computing devices. However, Boden2 discloses that limitation (Boden: column 1 lines 32-42). It is well known in the art to filter packets for incoming and outgoing packets. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Boden2 within the combination of Jain-Coss-Schmidt.

20. As per claim 17, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly disclose wherein each filter includes a plurality of filter parameters, and wherein each of the plurality of filter parameters can include wildcard values. However, Boden2 discloses that limitation (Boden2: column 7 line 66 – column 8 line 22). It would have been obvious to one having ordinary skill in the art to combine the teachings of Boden2 within the combination of Jain-Coss-Schmidt because packet filters are set by administrators based on different needs and requirements.

21. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Mayes et al. U.S. Pat. No. 6510154 (hereinafter Mayes).

22. As per claim 10, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly disclose wherein one or more filters in the set of filters restrict one or more of the transmission of data packets of a particular type from the computing device and reception of data packets of a particular type at the computing device. However, Mayes discloses that limitation (Mayes: abstract and column 1 line 9 and column 2 line 32). It is well known in the art to filter packets based on their type. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Mayes within the combination of Jain-Coss-Schmidt.

23. As per claim 11, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses wherein one or more filters in the set of filters restrict one or more of the transmission of Internet Protocol (IP) data packets from the computing device and reception of IP data packets at the computing device based on one or more of: a source address, a destination IP address, a source port, a destination port, and a protocol (Jain: column 2 lines 8-18 and abstract).

24. As per claim 12, Jain discloses a method as recited in claim 7, Jain further discloses wherein one or more filters in the set of filters identifies that a data packet targeting a particular

address can be transmitted from the computing device to the addressed device, and further identifies a new address that the particular address from the data packet is to be changed to prior to being communicated to the addressed device (Jain: column 1 line 65 – column 2 line 18).

25. As per claim 13, Jain discloses a method as recited in claim 7. Jain as modified discloses wherein one of the filters in the set of filters is a permissive filter that indicates a data packet can be passed to its targeted destination device if the data packet parameters match corresponding parameters of the filter (Coss: column 1 lines 20-24).

26. As per claim 14, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses wherein one of the filters in the set of filters is an exclusionary filter that indicates a data packet cannot be passed to its targeted destination device if the data packet parameters match corresponding parameters of the filter (Coss: column 1 lines 20-24).

27. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Epstein.

28. As per claim 15, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses allowing comprises allowing the set of filters to be modified by a remote devices (Coss: column 9 lines 7-18). Jain as modified does not explicitly disclose plurality of remote devices operating at different managerial levels. However, Epstein discloses a hierarchy in network in which certain node in the network has the ability to control many

functions and communication behaviors of other nodes (Epstein: column 2 lines 40-50). It would have been obvious to one having ordinary skill in the art to allow the remote devices having different level of authorities to configure the security settings of a subordinate node. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Epstein within the combination of Jain-Coss-Schmidt because it allows each node to be programmed by only certain other predetermined nodes (Epstein: column 1 lines 17-21).

29. As per claim 16, Jain as modified discloses a method as recited in 15. Jain as modified further discloses comprising allowing the set of filters to be modified by a lower managerial level remote device only if the modifications are not less restrictive than modifications imposed by a higher managerial level remote device (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

30. Claims 18 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Chopra et al. U.S. Pat. No. 6510509 (hereinafter Chopra).

31. As per claim 18 and 25, Jain as modified discloses a method as recited in claims 7 and 20 respectively. Jain as modified does not explicitly disclose wherein the set of filters restrict the ability of the computing device to communicate with other computing devices on a per-data packet basis, wherein each filter includes a plurality of filter parameters, and wherein each filter

parameter includes a filter value and a mask value indicating which portions of the filter value must match a corresponding parameter in a data packet for the data packet to satisfy the filter. However, Chopra discloses that limitation (Chopra: column 4 lines 25-56). It is well known in the art to filter packets according to mask values. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Chopra within the combination of Jain-Coss-Schmidt.

32. As per claim 26 and 27, Jain as modified discloses a network mediator as recited in claim 25. Jain as modified further discloses wherein the controller is to allow/prevent the data packet to be forwarded to the target device if the data packet satisfies the filter (Jain: column 1 line 65 – column 2 line 18 and abstract; Coss: column 1 lines 20-24).

33. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Epstein and further in view of Chopra.

34. As per claim 33, Jain as modified discloses a method as recited in claim 28. Jain as modified does not explicitly disclose wherein the set of filters restrict the ability of the computing device to communicate with other computing devices on a per-data packet basis, wherein each filter includes a plurality of filter parameters, and wherein each filter parameter includes a filter value and a mask value indicating which portions of the filter value must match a corresponding parameter in a data packet for the data packet to satisfy the filter. However,

Chopra discloses that limitation (Chopra: column 4 lines 25-56). It is well known in the art to filter packets according to mask values. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Chopra within the combination of Jain-Coss-Schmidt-Epstein.

35. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Epstein and further in view of Boden and further in view of Taylor et al. U.S. Pat. No. 6728885 (hereinafter Taylor).

36. As per claim 40 and 41, Jain as modified discloses a method as recited in claim 39. Jain as modified discloses address translation, which is well known in the art. Jain as modified does not explicitly disclose wherein the replacing comprises performing the replacing transparent to the computing device. However, Taylor discloses that limitation (Taylor: column 2 line 47 – column 3 line 9). It is well known in the art to address translation, which is transparent. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Taylor within the combination of Jain-Boden because it increase network security by prohibiting external network to view the actual address of a target device.

37. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Schmidt and further in view of Epstein and further in view of Boden

38. As per claim 43, Jain as modified discloses a method as recited in claim 39. Jain as modified further comprising: maintaining a set of filters that restrict the ability of the computing device to communicate with other computing devices (Jain: column 2 lines 8-18). Jain as modified does not explicitly disclose allowing multiple remote computing devices, each corresponding to a preventing a lower managerial level device from modifying the set of filters in a manner that would result in a violation of a filter added by a higher managerial level device.

However, Coss discloses remote proxy or administrator loads filters (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the combination of Jain-Boden because it is well known in the art.

Jain as modified does not explicitly disclose plurality of remote devices operating at different managerial levels. However, Epstein discloses a hierarchy in network in which certain node in the network has the ability to control many functions and communication behaviors of other nodes (Epstein: column 2 lines 40-50). It would have been obvious to one having ordinary skill in the art to allow the remote devices having different level of authorities to configure the security settings of a subordinate node. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Epstein within the combination of Jain-Coss-Schmidt because it allows each node to be programmed by only certain other predetermined nodes (Epstein: column 1 lines 17-21).

Response to Arguments

39. Applicant's arguments with respect to claims 1, 4, 6-41, and 43-47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen
Examiner
Art Unit 2131

SC

Primary Examiner
AU 2131
12/7/05